

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) Coating A coating for an interior surface of a substrate of a steam-generating device, the coating comprising:

a first layer deposited on the interior surface of the substrate of the steam-generating device for lowering a temperature of the substrate to a value below the Leidenfrost point;
and

a second layer deposited over the first layer,

wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic, wherein the second layer and comprises inorganic particles, and wherein the inorganic particles include selected from one of clay particles or and Al₂O₃ particles.

2. (Previously presented) The coating according to claim 1, wherein the second layer is a porous layer.

3. (Previously presented) The coating according to claim 1, wherein the first layer comprises at least one of a polyimide, polyamide-imide, and enamel.

4. (Previously presented) The coating according to claim 3, wherein the first layer comprises inorganic particles.

5. (Currently amended) The coating according to claim 1, wherein the second layer comprises A coating for an interior surface of a substrate of a steam-generating device, the coating comprising:

a first layer deposited on the interior surface of the substrate of the steam-generating device; and

a second layer deposited over the first layer,

wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic and comprises inorganic particles selected from one of clay particles and Al₂O₃ particles and mono-aluminum phosphate binders.

6-8. (Canceled)

9. (Previously presented) The coating according to claim 1, wherein a thickness of the first layer is around 30 to 100 µm and wherein the second layer is between 10 and about 15 µm in thickness.

10. (Currently amended) The coating according to claim 9, wherein the steam-generating device is part of an electrical domestic appliance such as selected from one of a steam

iron, a system iron, a steamer, a garment cleaner, a heated ironing board, or a facial steamer.

11. (Previously presented) The coating according to claim 1, wherein the first layer is adhered to the second layer.

12. (Currently amended) Coating-A coating for an interior surface of a substrate of a steam-generating device, the coating comprising:
a first layer deposited on the interior surface of the substrate of the steam-generating device for lowering a temperature of the substrate to a value below the Leidenfrost point; and

a second layer deposited over the first layer, wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic, wherein a composition of the first layer and the second layer is similar yet have different binder to filler ratios or have different filler particle sizes for each of the first and second layers.

13. (Currently amended) The coating according to claim 12, wherein the first layer is applied by spraying the first layer onto the interior surface of the substrate of the steam-generating device from a range selected to form initially a dense wet first layer.

14. (Previously presented) The coating according to claim 12, wherein the second layer is applied by spraying the second layer onto the first layer from a range selected to enable evaporation of solvent from sprayed droplets of the second layer before reaching a surface of the first layer.

15. (Currently amended) Coating A coating for an interior surface of a substrate of a steam-generating device, the coating comprising:

a first layer deposited on the interior surface of the steam-generating device substrate for lowering a temperature of the substrate to a value below the Leidenfrost point; and

a second layer deposited over the first layer, wherein the first layer is essentially impermeable to water and is thermally insulating and the second layer is hydrophilic,

wherein a composition of starter materials of the first layer and the second layer are similar and wherein whether the layer is essentially impermeable to water or is hydrophilic is determined by one of having different binder to filler ratios for each of the first and second layers, or having different filler particles sizes for each of the first and second layers.

16. (Previously presented) The coating according to claim 1, wherein the first layer has a composition that is thermally stable.

17. (Previously presented) The coating according to claim 1, wherein the second layer is comprised of mono-aluminum phosphate binders filled with the inorganic particles.

18. (Canceled)

19. (Previously presented) The coating according to claim 1, wherein compositions of the first and the second layers are cured during a same curing cycle to improve adhesion between the first and second layers.